

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A computer operable on at least one of AC and DC power comprising:
 - at least one central processing unit;
 - at least one fan disposed for providing cooling to said at least one central processing unit; and
 - a thermal manager, said thermal manager for monitoring a temperature of said at least one central processing unit and dynamically controlling a throttling of said at least one central processing unit and said at least one fan according to a thermal management algorithm, whereby a determination to lower a temperature threshold is made based on the algorithm looking at an AC charge, a battery temperature and a battery charge status.
2. (Original) The computer of claim 1, wherein the thermal management algorithm enables stabilization of the temperature of said at least one central processing unit below a prescribed temperature threshold over a given duration of time.
3. (Original) The computer of claim 2, wherein the temperature threshold includes body temperature.
4. (Original) The computer of claim 1, wherein said thermal manager further includes at least one basic input output system (BIOS) table, the at least one BIOS table identifying specific cooling actions to be implemented as a function of the temperature of the at least one central processing unit.

5. (Original) The computer of claim 1, further comprising a user setup routine, wherein said user setup routine enables a user to select a desired thermal operation mode for said thermal manager, the thermal operation modes including at least one of the following selected from the group consisting of (a) OFF Mode, wherein the OFF Mode disables a dynamic thermal management by said thermal manager, (b) ON Mode, wherein the ON Mode enables dynamic thermal management by said thermal manager, and (c) AUTO Mode, wherein the AUTO Mode enables and disables dynamic thermal management by said thermal manager according to a prescribed computer operational characteristic.
6. (Original) The computer of claim 5, wherein the prescribed computer operational characteristic includes at least one of the following selected from the group consisting of AC power mode, AC power with battery present mode, AC power mode with battery present and charge mode, AC power with battery absent mode, DC power mode, and computer docked mode with AC power.
7. (Original) The computer of claim 5, wherein the user setup routine includes AUTO Mode for a default setting, requiring no user input.
8. (Original) The computer of claim 5, wherein the OFF Mode is characterized by a first thermal management algorithm, the ON Mode is characterized by a second thermal management algorithm, and the AUTO Mode is characterized by a third thermal management algorithm.
9. (Currently Amended) The computer of claim 8, wherein the first thermal management algorithm includes a thermal management algorithm of the computer absent any dynamic thermal management, wherein the second thermal management algorithm includes at least one of the following selected from the

group consisting of (a) adjusting the thermal temperature threshold to be lower than body temperature, (b) enabling a ~~smart~~ CPU feature contained in a basic input output system (BIOS) of said computer, and (c) giving priority to said at least one fan if said computer is in an AC power mode, and wherein the third thermal management algorithm includes at least one of the following selected from the group consisting of (a) if said computer is docked in a docking station, then assume dynamic thermal management is in OFF Mode and do not adjust any temperature thresholds, (b) if said computer is not docked, then adjust the temperature thresholds to below body temperature, (c) if said computer is in AC power mode, then give thermal management priority to the at least one fan for holding the temperature of the at least one central processing unit down, and (d) if in DC power mode, utilize a new temperature threshold that is lower than body temperature for activation of thermal management by said thermal manager.

10. (Currently Amended) The computer of claim 9, wherein the ~~smart~~ CPU feature includes a function in BIOS for putting said at least one central processing unit into at least one low power state, wherein a cooling action may include said thermal manager causing the ~~smart~~ CPU feature to put said at least one central processing unit into the low power mode, even if said at least one central processing unit is not idle.
11. (Currently Amended) The computer of claim 10, wherein said thermal manager intermittently calls the ~~smart~~ CPU feature to effectively reduce a rate of rise in central processing unit temperature.
12. (Original) The computer of claim 1, wherein said computer further comprises a laptop computer and said thermal manager maintains a temperature of a case of

said computer proximate a location of said at least one central processing unit to no more than body temperature.

13. (Original) The computer of claim 1, wherein said thermal manager is operable upon launching of an operating system of said computer.
14. (Original) The computer of claim 13, wherein said thermal manager is further operable according to an enable, disable, and automatically enable/disable option via a graphical user interface control application.
15. (Original) The computer of claim 13, wherein the operating system includes a CPU temperature reading function.
16. (Original) The computer of claim 13, wherein said thermal manager carries out thermal management via a system management basic input output system (SMBIOS), further wherein a system management interrupt (SMI) triggers each time the temperature of said at least one central processing unit falls outside of a given temperature range, and responsive thereto, said thermal manager invokes a corresponding cooling action according to the thermal management algorithm.
17. (Original) The computer of claim 16. wherein the thermal management algorithm is characterized by thermal tables representative of various conditions that include at least DC power mode and AC power mode, respectively, further wherein said thermal manager switches the thermal tables in and out dynamically in response to an SMI representative of a respective condition.
18. (Original) The computer of claim 17, further wherein said thermal manager utilizes advanced configuration and power interface (ACPI) functions for returning

the central processing unit temperature reading, enabling thermal management, and disabling thermal management.

19. (Currently Amended) A thermal management method in a computer operating on at least one of AC and DC power including at least one central processing unit and at least one fan disposed for providing cooling to the at least one central processing unit, said method comprising:
 - monitoring a temperature of the at least one central processing unit; and
 - responsive to the monitored temperature and in accordance with a thermal management algorithm, dynamically controlling (i) a throttling of the at least one central processing unit and (ii) operation of the at least one fan for enabling stabilization of the temperature of the at least one central processing unit below a prescribed temperature threshold over a given duration of time, whereby a determination to lower a temperature threshold is made based on the algorithm looking at an AC charge, a battery temperature and a battery charge status.
20. (Original) The method of claim 19, wherein the temperature threshold includes body temperature.
21. (Original) The method of claim 19, further comprising, utilizing at least one basic input output system (BIOS) table for the thermal management algorithm, the at least one BIOS table identifying specific cooling actions to be implemented as a function of the temperature of the at least one central processing unit.
22. (Original) The method of claim 19, further comprising, utilizing a user setup routine for enabling a user to select a desired thermal management operation mode for dynamically controlling thermal management, the thermal operation modes including at least one of the following selected from the group consisting

- of (a) OFF Mode, wherein the OFF Mode disables dynamic thermal management, (b) ON Mode, wherein the ON Mode enables dynamic thermal management, and (c) AUTO Mode, wherein the AUTO Mode enables and disables dynamic thermal management according to a prescribed computer operational characteristic.
23. (Original) The method of claim 22, wherein the prescribed computer operational characteristic includes at least one of the following selected from the group consisting of AC power mode, AC power with battery present mode, AC power mode with battery present and charge mode, AC power with battery absent mode, DC power mode, and computer docked mode with AC power.
24. (Original) The method of claim 22, wherein the OFF Mode is characterized by a first thermal management algorithm, the ON Mode is characterized by a second thermal management algorithm, and the AUTO Mode is characterized by a third thermal management algorithm.
25. (Currently Amended) The method of claim 24, wherein the first thermal management algorithm includes a thermal management algorithm of the computer absent any dynamic thermal management, wherein the second thermal management algorithm includes at least one of the following selected from the group consisting of (a) adjusting the thermal temperature threshold to be lower than body temperature, (b) enabling a smart CPU feature contained in a basic input output system (BIOS) of the computer, and (c) giving priority to the at least one fan if the computer is in an AC power mode, and wherein the third thermal management algorithm includes at least one of the following selected from the group consisting of (a) if the computer is docked in a docking station, then assume dynamic thermal management is in OFF Mode and do not adjust any

temperature thresholds, (b) if the computer is not docked, then adjust the temperature thresholds to below body temperature, (c) if the computer is in AC power mode, then give thermal management priority to the at least one fan for holding the temperature of the at least one central processing unit down, and (d) if in DC power mode, utilize a new temperature threshold that is lower than body temperature for activation of thermal management.

26. (Currently Amended) The method of claim 25, wherein the ~~smart~~ CPU feature includes a function in BIOS for putting the at least one central processing unit into at least one low power state, wherein a cooling action may include said thermal manager causing the ~~smart~~ CPU feature to put said at least one central processing unit into the low power mode, even if the at least one central processing unit is not idle.
27. (Currently Amended) The method of claim 26, wherein dynamically controlling further includes intermittently calling the ~~smart~~ CPU feature to effectively reduce a rate of rise in central processing unit temperature.
28. (Original) The method of claim 19, wherein the computer is a laptop computer and said dynamically controlling step maintains a temperature of a case of the computer proximate a location of the at least one central processing unit to no more than body temperature.
29. (Currently Amended) A method of upgrading thermal management in a computer operating on at least one of AC and DC power having a central processing unit and a fan disposed for providing cooling to said central processing unit; said method comprising:

installing a thermal manager in a basic input output system (BIOS) of the computer; and

storing a thermal management algorithm in the BIOS computer, wherein the thermal manager is operable for monitoring a temperature of the central processing unit and for dynamically controlling a throttling of the central processing unit and the fan according to the thermal management algorithm, wherein the thermal management algorithm enables stabilization of the temperature of the central processing unit below a prescribed temperature threshold over a given duration of time, whereby a determination to lower a temperature threshold is made based on the algorithm looking at an AC charge, a battery temperature and a battery charge status.

30. (Previously Presented) The method of claim 29, further comprising utilizing a basic input output system (BIOS) table for the thermal management algorithm, the BIOS table identifying specific cooling actions to be implemented as a function of the temperature of the central processing unit.
31. (Previously Presented) The method of claim 29, further comprising utilizing a user setup routine for enabling a user to select a desired thermal management operation mode for dynamically controlling thermal management, the thermal operation modes including one of the following selected from the group consisting of (a) OFF Mode, wherein the OFF Mode disables dynamic thermal management, (b) ON Mode, wherein the ON Mode enables dynamic thermal management, and (c) AUTO Mode, wherein the AUTO Mode enables and disables dynamic thermal management according to a prescribed computer operational characteristic.

32. (Previously Presented) The method of claim 31, wherein the prescribed computer operational characteristic includes one of the following selected from the group consisting of AC power mode, AC power with battery present mode, AC power mode with battery present and charge mode, AC power with battery absent mode, DC power mode, and computer docked mode with AC power.
33. (Original) The method of claim 31, wherein the OFF Mode is characterized by a first thermal management algorithm, the ON Mode is characterized by a second thermal management algorithm, and the AUTO Mode is characterized by a third thermal management algorithm.